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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/647,559 08/25/2003 Dwayne Perry 4726-014 3227 24112 7590 06/02/2005 EXAMINER COATS & BENNETT, PLLC MARC, MCDIEUNEL POBOX 5 ART UNIT PAPER NUMBER RALEIGH, NC 27602 3661

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		
	Application No.	Applicant(s)
Office Action Summary	10/647,559	PERRY ET AL.
	Examiner	Art Unit
	McDieunel Marc	3661
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on <u>25 August 2003</u> .		
2a) ☐ This action is FINAL . 2b) ☒ This	action is non-final.	·
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4)⊠ Claim(s) <u>1-27</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5)⊠ Claim(s) <u>1-5 and 21-26</u> is/are allowed.		
6)⊠ Claim(s) <u>1-5 and 21-27</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement.		
Application Papers		
9) The specification is objected to by the Examiner.		
10)⊠ The drawing(s) filed on <u>25 August 2003</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
. Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).		
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) Some * c) None of:		
1. Certified copies of the priority documents have been received.		
 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage 		
application from the International Bureau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list of the certified copies not received.		
Attachment(s)		
1) X Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	te
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) L. Notice of Informal Page 6) Dther:	atent Application (PTO-152)
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DETAILED ACTION

1. Claims 1-27 are presented for examination.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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3. Claims 6-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 14 of U.S. Patent No. 6,840,895. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the application encompass the claims of patent because they are broader.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 6-13 and 14-20 are rejected under 35 U.S.C. 102(b) as being anticipated by **CNC Automation, Inc.** hereinafter CNC.

As per claim 6, <u>CNC</u> teaches CNC Milling machine which being considered as a robotic tool changer (see figs. on page 1 of 2), comprising: a master module (see figs. on page 1 of 2, particularly the computer being considered as master module) and a tool module adapted to be coupled and decoupled (see figs. on page 1 of 2, particularly the machine, wherein inherently the master and tool can be coupled and decoupled); and a clocked communication bus between said master and tool modules (inherently the bus line which connects the master and the tool being considered as a clocked communication bus). With respect to claim 14, <u>CNC</u> teaches a method of communicating information between a tool module of a robotic coupler and a robotic system communications network (see figs. on page 1 of 2 as noted above), comprising:

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connecting said tool module to a master module of said robotic coupler (see figs. on page 1 of 2 as noted above), said master module including a robotic system communications network node (see figs. on page 1 of 2 as noted above); supplying tool information from said tool module to said master module network node via a serial communication bus between said master and tool modules (see figs. on page 1 of 2 as noted above); and communicating said tool information from said master module network node to said robotic system communications network (see figs. on page 1 of 2 as noted above).

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As per claim 7-13 and 15-20, <u>CNC</u> teaches a system and an associated method having a tool changer, wherein said clocked communication bus comprises at least one data line and at least one clock line (see figs. on page 1 of 2 as described above regarding data line); at least one data line is differentially driven; and clocked communication bus is bi-directional; clocked communication bus is a serial bus (driving data line, bi-directional clocked communication, serial bus clocked communication being considered as design choice); a tool changer of claim 6 wherein said master module includes a robotic system communications network node (inherently such node has been included by the bus line in order to have a master slave relationship); tool information is supplied to said tool module by a tool attached to said tool module (the computer system being considered also as a tool); wherein said tool module does not include a robotic system communications network node (inherently once the master being decoupled the above limitation is met); a said serial communication bus comprises two data lines (once again such limitation fall under design choice).

Allowable Subject Matter

6. Claims 1-5 and 21-26 are allowed.

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7. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fail to teach or fairly suggest with respect to claim 1, a method of rapidly communicating information between a tool module of a robotic tool coupler wherein said communication commencing within about 250 msec. after said coupling; and communicating said tool information from said master module network node to said robotic system communications network; with respect to claim 21, a robotic tool changer comprising a tool module adapted to be coupled and decoupled to said master module and not connected to said robotic system communications network, said tool module operative to communicate tool information to said robotic system communications network via said master module network node in combination with the other elements and features of the claimed invention.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to McDieunel Marc whose telephone number is (571) 272-6964. The examiner can normally be reached on 6:30-5:00 Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

McDieunel Marc

Saturday, May 28, 2005

MM/